

Appln No 10/810,161
Mckittrick et al.

This listing of claims will replace all prior versions and listing of claims in the application.

LISTING OF CLAIMS

1. (withdrawn) A heat exchanger for an automotive vehicle having a heat exchanger tank and a baffle system, comprising:

a first end tank divided into a first portion and a second portion by a baffle in the first end tank;

a plurality of a first tubes in fluid communication with the first portion of the first end tank, the plurality of first tubes configured to have a first fluid flow therethrough;

a plurality of second tubes in fluid communication with the second portion of the first end tank;

the end tank further comprising a contact area having a deformation, perforation, slot or other shaped mating hole for a tab;

wherein:

- i) the baffle system comprises at least one one-piece double baffle, the one-piece double baffle including at least two baffle profiles and at least one tab; and
- ii) the one-piece double baffle is disposed within the end tank and is folded so that the one-piece double baffle has baffle profiles that are roughly parallel to each other.

2. (withdrawn) A heat exchanger as in claim 1 wherein the one-piece double baffle comprises a tab at one section of its folded area and the end

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tank has a perforation, slot or shaped mating hole for insertion of the tab of the one-piece double baffle.

3. (withdrawn) A heat exchanger as in claim 2 wherein the tab extends through the wall of end tank, thereby securing its position and forming a seal.

4. (withdrawn) A heat exchanger as in claim 3, wherein the seal formed is essentially leak-tight.

5. (withdrawn) A heat exchanger as in claim 1, wherein the at least one one-piece double baffle comprises at least two baffle profiles, each of the at least two baffle profiles having a common central portion and forming a chamber portion.

6. (withdrawn) A heat exchanger as in claim 1 wherein the at least one tab has a relief means throughout its thickness.

7. (withdrawn) A heat exchanger as in claim 2 wherein the end tank has a relief means at a point contiguous with the tab.

8. (withdrawn) A heat exchanger as in claim 1 wherein the one-piece double baffle is formed from one continuous piece of material.

9. (withdrawn) A heat exchanger tank according to claim 1 wherein the one-piece double baffle for separating fluid sections has perimeter walls that are approximately perpendicular to the tank wall surface.

10. (withdrawn) A heat exchanger as in claim 9 wherein the perimeter walls of the baffle profiles have a common center area.

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11. (withdrawn) A heat exchanger for an automotive vehicle having a heat exchanger tank and a baffle system, comprising:

a first end tank divided into a first portion and a second portion by a baffle the first end tank including;

a plurality of a first tubes in fluid communication with the first portion of the first end tank, the plurality of first tubes configured to have a first fluid flow therethrough;

a plurality of second tubes in fluid communication with the second portion of the first end tank, the plurality of second tubes configured to have a second fluid different from the first fluid, flow therethrough; and

the end tank further comprising at least one deformation, perforation, slot or other shaped mating hole for a tab;

wherein:

- i) the baffle system comprises at least one one-piece double baffle, each one-piece double baffle including at least two baffle profiles and at least one tab, and,
- ii) each one-piece double baffle is disposed within the end tank and is folded so that the one-piece double baffle has baffle profiles that are roughly parallel to each other.

12. (withdrawn) A heat exchanger as in claim 11 wherein the one-piece double baffle comprises a tab at one section of its folded area and the end tank has a perforation, slot or shaped mating hole for insertion of the tab of the one-piece double baffle.

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13. (withdrawn) A heat exchanger as in claim 12 wherein the tab extends through the wall of end tank, thereby securing its position and forming a seal.

14. (withdrawn) A heat exchanger as in claim 13, wherein the seal formed is essentially leak-tight.

15. (withdrawn) A heat exchanger as in claim 11, wherein the at least one one-piece double baffle comprises at least two baffle profiles, each of the at least two baffle profiles having a common central portion or area and forming a chamber portion.

16. (withdrawn) A heat exchanger as in claim 11 wherein the at least one tab has relief means throughout its thickness.

17. (withdrawn) A heat exchanger as in claim 12 wherein the end tank has a relief means throughout its thickness at a point contiguous with the tab.

18. (withdrawn) A heat exchanger as in claim 11 wherein the one-piece double baffle is formed from one continuous piece of material.

19. (withdrawn) A heat exchanger tank according to claim 11 wherein the one-piece double baffle for separating fluid sections has perimeter walls that are approximately perpendicular to the tank wall surface.

20. (withdrawn) A heat exchanger as in claim 19 wherein the perimeter walls of the baffle profiles have a common center portion or area.

21. (original) A method for making a heat exchanger tank assembly

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comprising:

manufacturing a one-piece double baffle comprising a tab at an area of insertion, fold or bend on the double baffle and with peripheral walls of the double baffle formed so that they form a central chamber;

providing a heat exchanger end tank which comprises a contact area comprising a deformation, perforation, slot or other shaped mating hole for insertion of the tab of the double baffle;

aligning the tab of the baffle and the end tank contact area so that the tab may be inserted into the contact area chamber;

inserting the one-piece double baffle in the end tank at the contact of the end tank; and

applying a sealing technique such that the double baffle remains in place after the assembly process and the completed heat exchanger assembly may be used in automotive applications.

22. (new) A method as in claim 21, further comprising extending the tab through the wall of the end tank, thereby securing its position and forming a seal.

23. (new) A method, as in claim 22, further comprising forming the seal so that it is essentially leak-tight.

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24. (new) A method, as in claim 21, wherein the one-piece double baffle comprises at least two baffle profiles, each of the at least two baffle profiles having a common central portion and forming a chamber portion.

25. (new) A method, as in claim 21, further comprising forming a relief means throughout the thickness of the tab.

26. (new) A method, as in claim 21, further comprising forming a relief means in the end tank at a point contiguous with the tab.

27. (new) A method, as in claim 25, further comprising forming a relief means in the end tank at a point contiguous with the tab.

28. (new) A method, as in claim 21, wherein the one-piece double baffle is formed from one continuous piece of material.